

CCTV: DEVELOPING PRIVACY BEST PRACTICES

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Hilton Arlington

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Technology Perspectives

Issues & Challenges

Contract Cost Driver Considerations

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Contract Cost Driver Considerations

- TEAM BUILDING – a required attribute
 - DHS-level contracts almost certainly affect multiple stakeholders not under contract
 - Power Companies (long-lead service)
 - Municipalities (historic, architectural, co-development & planning)
 - DOTs (surveillance attachments, right of ways)
 - Owners of the Critical National Infrastructure
 - Safety Support Personnel (track protection, lifts, high voltage, TICs, etc.)
 - Unions (perimeter vs. internal surveillance, labor claims, maintenance claims, strikes/force majeure)
 - CONOPS (raw data vs. operations – connecting technology with the responders)
 - Industry-Employed First Responders
 - LLE / State / Federal coordination
 - Adjacent Landowners

Contract Cost Driver Considerations

- PRE-AWARD ASSUMPTIONS DRIVE COSTS – what's in place and what needs constructed?
 - Infrastructure
 - Space (headend, work stations, etc.)
 - Intelligent vs. Non-Intelligent
 - Edge-based vs. Server-based Analytics
 - HVAC
 - Power & Vital Power
 - High voltage, Low voltage, Step down
 - Generator, UPS, Auto-Transfer
 - Who Pays (separate metered service?)
 - Backhaul / Comms (a costly investment)
 - Construction
 - Internet Connectivity
 - » Managed vs. Unmanaged Service
 - » Redundant Connections (operationally vital data)

Contract Cost Driver Considerations

- PRE-AWARD ASSUMPTIONS DRIVE COSTS – what's in place and what needs constructed?
 - LAN vs. Stand-Alone (metadata vs. streaming video)
 - LAN-solution must be an enterprise endeavor (not segmented if video is running across existing entity network)
 - Bandwidth / Storage / Backed-up Storage
 - Video Compression (PTZ vs. Fixed Cameras)
 - Fully Streaming 24/7/365 vs. Motion Activated
 - Gold-Disk Requirements
 - IT Security Slows System (impact to LAN)
 - Webcam-mania (everyone wants to see video remotely – even from home)
 - Frame Rates (5fps, 15fps, 30fps)
 - Resolution (analog vs. mega pixel)
 - Encryption

Contract Cost Driver Considerations

- PRE-AWARD ASSUMPTIONS DRIVE COSTS – what's in place and what needs constructed?
 - Soil Disturbance (poles, fencing, trenching, directional boring)
 - Remediation expenses not DHS funded
 - » Chemical / Railways / Ports / other long-standing industries
 - Archeological Interruptions (force majeure?)
- PHYSICAL VULNERABILITIES – Achilles heel for defeating the system
 - Overt / Covert Systems
 - Typical Criminal Threat
 - Terrorist Threat (sophisticated, educated, calculated)
 - Headend (how hard is it to find?)
 - Aerial Cables / Antennas
 - Cameras (low-end enclosures)
 - Interference / Scrambling

Contract Cost Driver Considerations

- ENGINEERING, CONFIGURATION CONTROL, LIFE CYCLE MANAGEMENT (in order to manage and troubleshoot a system, one needs to know what the system looks like at any given point in time)
 - Drawing Management SOP
 - Initial Detail Design
 - Review & Approval (initial and revisions)
 - Vested Parties (DHS, Prime, NEPA, Critical Infrastructure Owner, etc.)
 - Installer's Request to Deviate
 - Red Line Corrections (as-built updates)
 - Revision Management & Distribution
 - Material Management SOP
 - DHS Barcode Requirements
 - Annual Reporting Requirements
 - Item, Model, s/n, Barcode, Cost, Disposition, etc.
 - Revision Management (disposition; new, scrapped, relocated, etc.)
 - Document Control SOP
 - User Manual Revision Management
 - Software Revision Management
 - -end-